

On page 40, at line 14, delete "Zener diode" and substitute --rectifier--; at line 29, delete "Thus,"; at line 30, delete "circuit" and substitute "Circuit"; at line 30, delete "both"; delete line 31 to the period.

On page 42, at line 6, delete "voltage" and substitute --signal--.

On page 44, at line 32, delete "combined currents" and substitute --current--; at line 33, delete "and discharging capacitor C1 provide" and substitute --provides--.

On page 45, at line 10, after the comma, insert ~~because~~ conduction of TRIAC 601 shorts the two terminals of semiconductor switch 1, thus substantially eliminating the voltage drop across Liu Switch 300, --.

#### IN THE CLAIMS

In ~~Claim~~ 4, at line 6, please delete "cycle" and substitute --half-cycle--.

In ~~Claim~~ 56, at line 3, please delete the first occurrence of "voltage" and substitute --output signal--.

In ~~Claim~~ 79, at line 6, please delete "cycle" and substitute --half-cycle--.

Please amend Claim ~~17-18~~, 69, 81, 91, 98-99 and 113 as follows:

17. (Amended) A solid state electrical switch as in Claim 16, wherein said bipolar transistor comprises an NPN bipolar transistor, and said gain circuit further comprises a diode coupled in an antiparallel manner between a base terminal of said bipolar transistor and an emitter terminal of said bipolar transistor, a collector terminal of said bipolar transistor being coupled to receive said rectified signal.



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18. (Amended) A solid state electrical switch as in Claim 16, wherein said bipolar transistor comprises a PNP transistor, and said gain circuit further comprises a diode coupled in an antiparallel manner between a base terminal of said bipolar transistor and [a collector] an emitter terminal of said bipolar transistor, said [collector] emitter terminal being coupled to receive said rectified signal.

69. (Amended) A multipoint random control system, comprising:  
a 2-terminal solid state electrical switch coupled in series with a load circuit between a [phase] first line of an AC power outlet and a [neutral] second line of said AC power outlet, said solid state electrical switch being responsive to first and second control signals, wherein when said first control signal is [asserted] received, said solid state electrical switch becomes [non-conducting] conducting, and when said second control signal is [asserted] received, said solid power switch becomes [conducting] non-conducting

an optocoupler coupled to said solid state electrical switch to provide said first and second control signals, said optocoupler receiving first and second electrical signals from a signal bus and providing as said first and second control signals optically isolated output signals representing said first and second electrical signals; and

a plurality of devices coupled to said signal bus, each device being capable of [asserting] providing as output signals of said devices said first and second electrical signals.



a<sup>11</sup>  
81. (Amended) A method as in Claim 76, further step of generating said control signal comprising:

rectifying an AC signal received from said AC outlet into a rectified signal;  
charging a capacitor by said rectified signal, when said switch device is not conducting; and  
in response to an electrical signal, creating a low impedance path across said capacitor, said low impedance path discharging said capacitor [in response to an electrical signal] and allowing said rectified signal to provide said control signal.

a<sup>12</sup>  
91. (Amended) A method as in Claim 90, wherein said initialization circuit is responsive to a deactivation signal that causes said initialization circuit to switch from said second state to said first state, said method further comprising providing a deactivating circuit responsive to a second external stimulus to provide said deactivation signal.

a<sup>13</sup>  
98. (Amended) A method for detecting contact of a touch panel by an external agent, comprising:  
detecting a resistance of said external agent between said touch panel and a ground reference;  
detecting a capacitance of said external agent between said touch panel and said ground reference;  
detecting an inductive source imposed across said external agent by stray electromagnetic fields; and  
providing a gain circuit including a control terminal coupled to said touch panel, said gain circuit providing an output signal when one or more of said resistance,



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could

said capacitance [or] and said inductive source [exceeds] individually or in combination exceed a predetermined value.

99. (Amended) A method as in Claim 98 wherein said detecting a resistance, said detecting a capacitance and said detecting an inductive source are [being] provided by a resistor coupled in series with said touch panel, a capacitor coupled between said [touch panel] resistor and a [first] reference [voltage], and a diode coupled in a reverse-biased configuration [between a second reference voltage] across said control terminal and said reference.

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113. (Amended) A method for providing an electrical switch with built-in over-voltage protection, comprising:

providing a semiconductor switch circuit coupled in series with a load, said semiconductor circuit entering a conducting state when triggered by a trigger signal received at a control terminal, and entering a non-conducting state when a predetermined circuit condition is met, wherein said conducting state, the [impedance] voltage drop across said semiconductor switch circuit is substantially less than the [impedance] voltage drop across said load; and

providing a feedback circuit which provides said trigger signal when a voltage across said semiconductor switch circuit exceeds a predetermined value, said feedback circuit being provided with an internal latch circuit such that, once said trigger signal is provided, said feedback circuit continues to provide said trigger signal to maintain said semiconductor switch circuit in said conducting state.